

The Pierce County, Washington, Coordinated Salmon Habitat Protection and Restoration Strategy

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Salmon habitat recovery is a complex effort involving the incorporation of good scientific information in a process that balances social, economic, cultural, and environmental needs. While local governments, non-profit groups, and regional coalitions may find the effort to coordinate these disparate elements challenging, there are tools available to make educated projections and set priorities about what actions need to be taken to ensure salmon habitat recovery.

Ecosystem Diagnosis and Treatment Model

Pierce County is using one such tool to coordinate data and knowledge about salmon habitat conditions. The Ecosystem Diagnosis and Treatment (EDT) methodology is a life history model that uses empirical habitat data and expert opinions provided by local scientist and practitioners, to understand habitat requirements for various salmon life stages in different stream segments. The result of the modeling exercise allows us to identify priority stream reaches and limiting habitat characteristics for each life stage within each reach. Suites of restoration actions, or “scenarios,” are then identified to address those habitat characteristics in priority areas, and the impact of restoration is modeled assuming the actions are implemented. While the actions identified are not an absolute list of things that should be done, they provide guidance to those choosing to address salmon habitat issues. Pierce County has made the results of the EDT model available on a website at <http://www.mobrand.com/edt>. In addition, Pierce County has created an interactive website that provides non-experts in restoration (e.g. school and community groups) information and guidance on effective types of restoration activities tailored to different geographic areas at http://www.mobrand.com/citizens_report/pierce. The results of the EDT modeling are informing Pierce County government in a wide range of salmon habitat restoration and protection measures., including:

- **SRFB Lead Entity Strategy.** The strategies provide guidance for organizations seeking funding through the Salmon Recovery Funding Board.
- **Critical Area Ordinance.** A comprehensive review and update of the County’s environmental regulations using best available science.
- **Sub-Basin Planning.** This identification and prioritization of water quality, flood control, and habitat problems, and allocation of capital funds to solve the problems.
- **WRIA 10 & 12 Chinook Recovery Plan.** EDT modeling formed the basis of the habitat component of the WRIA 10/12 Chinook Recovery Plan.
- **South Puget Sound Chinook Recovery Plan.** The nearshore salmon habitat assessment and EDT modeling formed the basis of the habitat component of the South Puget Sound Chinook Recovery Plan.

Coordination Tools

In addition to EDT, Pierce County is relying on numerous science-based, regulatory, administrative, and funding tools to help us in our efforts to coordinate salmon recovery efforts.

Science-Based Habitat Assessment and Prioritization Tools

- EDT modeling of Puyallup/White system (WRIA 10), Chambers/Clover Creek (WRIA 12) system, and Kitsap/Key Peninsula (WRIA 15)
- EDT modeling of Nisqually River (WRIA 11)
- Key Peninsula, Gig Harbor, and Islands Watershed Nearshore Salmon Habitat Assessment using the Tidal Habitat Model
- GAP Analysis to identify Biodiversity Management Areas
- Limiting Factors Analysis for WRIA 10, 11, 12, and 15

Regulatory tools

- Critical Areas Ordinance
- Community Plans
- Shoreline Management Plan

Administrative Tools

- Sub-basin plans
- Flood protection plans – Repetitive Loss Program
- Levee Setback projects

Funding Tools

- Salmon Recovery Funding Board (SRFB) Lead Entity Process
- Community Salmon Fund – awards grants to important salmon habitat restoration projects
- Conservation Futures – land preservation program for protection of threatened areas of open space, timber lands, wetland, habitat areas, agricultural and farm lands within the boundaries of Pierce County.
- Public Benefit Rating System – a County-wide program that provides property tax reduction for landowners' protection of priority areas

The County also participates and plays a leadership role in regional habitat restoration and protection efforts including the Tri-County process, the Shared Salmon Strategy, the South Sound Salmon Recovery effort, Nisqually Salmon Recovery Planning, the Salmon Recovery Funding Board Lead Entity process for WRIAs 10 and 12, the Puget Sound Nearshore Ecosystem Restoration Project, the Statewide Biodiversity program, and others.